**United States Department of Agriculture**

NRCS
Natural Resources Conservation Service
6013 Lakeside Boulevard
Indianapolis, IN 46278

July 8, 2002

SUBJECT: SOI – Soil Correlation, Second Amendment to the Classification and Correlation of Lawrence County, Indiana

File Code: 430-15

TO: Travis Neely
State Soil Scientist/MLRA R-11 Team Leader
Indianapolis, IN

Enclosed are four copies of the Second Amendment to the Classification and Correlation of the soils of Lawrence County, Indiana.

This second amendment is made to correct deficiencies and to maintain the Lawrence County soil survey. The Hoosierville map units were evaluated and revised as noted in the attached amendment. A detailed explanation of the objectives, procedures and summary is attached to the second amendment document. The NASIS data set was also revised to include all the new approved map unit symbols and names.

FILE

Please add the amended pages to your copy of the Correlation Memorandum, approved April 1982.

JANE E. HARDISTY
State Conservationist

Enclosure

Cc: Tommie L. Parham, Director, National Cartography & GIS Center, NRCS, Ft. Worth, TX
Robert J. Ahrens, Director, NSSC, MS 41, NRCS, Lincoln, NE
Bruce W. Thompson, State Soil Scientist/MLRA R-12 Leaders, NRCS, Amherst, MA
Stephen Carpenter, State Soil Scientist/MLRA R-13 Leader, NRCS, Morgantown, WV
William H. Craddock, State Soil Scientist/MLRA R-18 Leader, NRCS, Lexington, KY
Don Franzmeir, Agronomy Dept. Purdue University, West Lafayette, IN
Pat Merchant, Soil Scientist, USFS, Bedford, IN
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Jonathan C. Gerken, State Soil Scientist, NRCS, Columbus, OH
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David Kriz, State Soil Scientist, NRCS, Richmond, VA
William D. Hosteter, Soil Scientist, NRCS, Indianapolis, IN
Byron G. Nagel, MLRA Project Leader, NRCS, North Vernon, IN
Shane McBurnett, MLRA Project Leader, NRCS, Plymouth, IN
Bennie Clark, Jr., MLRA Project Leader, NRCS, Indianapolis, IN
George McElrath, Jr., Resource Soil Scientist, NRCS, Corydon, IN
Kendall M. McWilliams, Resource Soil Scientist, NRCS, Jasper, IN

GRS/lc

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United States Department of Agriculture
Natural Resources Conservation Service
MLRA 11 Office, Indianapolis, Indiana
July 1, 2002

Second Amendment of the Classification and Correlation
of the Soils of Lawrence County, Indiana.

This second amendment was prepared by Gary R. Struben, Soil Data Quality Specialist, MLRA Region 11, Indianapolis, Indiana.

Pages 2 to 5, Add the following:

Approved Map Unit Name

Field symbol- BdB
Field map unit name- Bedford-Stoy silt loams, 1 to 4 percent slopes
Publication symbol- BdB
Approved map unit name- Bedford-Stoy silt loams, 1 to 4 percent slopes

Field symbol- BrA
Field map unit name- Bromer silt loam, 0 to 2 percent slopes
Publication symbol- BrA
Approved map unit name- Bromer silt loam, 0 to 2 percent slopes

Field symbol- PgA
Field map unit name- Peoga silt loam, clayey substratum, 0 to 1 percent slopes
Publication symbol- PgA
Approved map unit name- Peoga silt loam, clayey substratum, 0 to 1 percent slopes

Field symbol- SyA
Field map unit name- Stoy silt loam, 0 to 2 percent slopes
Publication symbol- SyA
Approved map unit name- Stoy silt loam, 0 to 2 percent slopes

Page 9, Add the following to the PRIME FARMLAND MAP UNITS

| Publication symbol: | Approved map unit name: |
|---|---|
| BdB | Bedford-Stoy silt loams, 1 to 4 percent slopes |
| BrA | Bromer silt loam, 0 to 2 percent slopes (where drained) |
| PgA | Peoga silt loam, clayey substratum, 0 to 1 percent slopes (where drained) |
| SyA | Stoy silt loam, 0 to 2 percent slopes (where drained) |

Page 10 & 11, Add the following to the Conversion Legend:

| Field Symbols | Publication Symbols |
|---|---|
| BdB | Bdb |
| BrA | BrA |
| PgA | PgA |
| SyA | SyA |

Page 17 & 18, CLASSIFICATION OF THE SOILS, Replace the classification table in the original correlation document from April of 1982 with the following:

## CLASSIFICATION OF THE SOILS

(Classification is based on the "Eighth Edition of the Keys to Soil Taxonomy")
* Indicates a taxadjunct to the series.

| Soil name | Family or higher taxonomic class |
|---|---|
| *Abscota | Mixed, mesic Oxyaquic Udipsamments |
| Alvin | Coarse-loamy, mixed, superactive, mesic Typic Hapludalfs |
| Bartle | Fine-silty, mixed, active, mesic Aeric Fragiaqualfs |
| Bedford | Fine-silty, mixed, active, mesic Oxyaquic Fragiudalfs |
| Berks | Loamy-skeletal, mixed, active, mesic Typic Dystrudepts |
| Bloomfield | Sandy, mixed, mesic Lamellic Hapludalfs |
| *Bonnie | Fine-silty, mixed, active, acid, mesic Typic Fluvaquents |
| Bromer | Fine-silty, mixed, active, mesic Aeric Fragic Epiaqualfs |
| Burnside | Loamy-skeletal, mixed, active, mesic Oxyaquic Dystrudepts |
| Caneyville | Fine, mixed, active, mesic Typic Hapludalfs |
| *Chagrin | Fine-loamy, mixed, active, mesic Dystric Fluventic Eutrudepts |
| Crider | Fine-silty, mixed, active, mesic Typic Paleudalfs |
| Ebal | Fine, mixed, active, mesic Oxyaquic Hapludalfs |
| Elkinsville Variant | Coarse-loamy, mixed, active, mesic Typic Hapludalfs |
| Frederick | Fine, mixed, semiactive, mesic Typic Paleudults |
| Gilpin | Fine-loamy, mixed, active, mesic Typic Hapludults |
| Haymond | Coarse-silty, mixed, superactive, mesic Dystric Fluventic Eutrudepts |
| Henshaw | Fine-silty, mixed, active, mesic Aquic Hapludalfs |
| Hoosierville | Fine-silty, mixed, superactive, mesic Typic Epiaqualfs |
| Hosmer | Fine-silty, mixed, active, mesic Oxyaquic Fragiudalfs |
| Markland | Fine, mixed, active, mesic Typic Hapludalfs |
| *McGary | Fine, mixed, active, mesic Aeric Epiaqualfs |
| *Muren | Fine-silty, mixed, superactive, mesic Aquic Hapludalfs |
| Newark | Fine-silty, mixed, active, nonacid, mesic Aeric Fluvaquents |
| Nolin | Fine-silty, mixed, active, mesic Dystric Fluventic Eutrudepts |
| *Pekin | Fine-silty, mixed, active, mesic Aquic Fragiudults |
| Peoga | Fine-silty, mixed, superactive, mesic Fragic Epiaqualfs |
| Petrolia | Fine-silty, mixed, superactive, nonacid, mesic Fluvaquentic Endoaquepts |
| Princeton | Fine-loamy, mixed, active, mesic Typic Hapludalfs |
| *Stendal | Fine-silty, mixed, active, acid, mesic Fluvaquentic Endoaquepts |
| *Stoy | Fine-silty, mixed, superactive, mesic Fragiaquic Hapludalfs |
| Tyner | Mixed, mesic Typic Udipsamments |
| Udorthents | Loamy, mixed, mesic Typic Udorthents |
| Weikert | Loamy-skeletal, mixed, active, mesic Lithic Dystrudepts |
| Wellston | Fine-silty, mixed, active, mesic Ultic Hapludalfs |
| Wilbur | Coarse-silty, mixed, superactive, mesic Fluvaquentic Eutrudepts |

Second Amendment of the Classification and Correlation
of the Soils of Lawrence County, Indiana.

Approval Signatures and Date

Travis Neely 7/1/02

Travis Neely
Soil Survey Area 11
Team Leader
Indianapolis, Indiana

Date

Jane E. Hardisty 7/8/02

Jane E. Hardisty
State Conservationist
Indianapolis, Indiana

Date

Amendment to the Classification and Correlation of the Soils of Lawrence County, Indiana (April 1982)

The Hoosierville map unit was evaluated and revised as per this amendment. In 1996, William Hosteter, George McElrath, Jr. and Ken McWilliams completed a field check of all delineations of the *Hoosierville silt loam* map unit throughout the county. The objective in revising this map unit was to improve the soils information that the Field Office and general public could use for planning purposes, especially for the implementation of the Farm Programs.

The following map units are added to the legend for soils that did not fit the concept of the Hoosierville Series:

BdB Bedford-Stoy silt loams, 1 to 4 percent slopes

This unit was separated from the Hoosierville map unit because it was more sloping and the drainage class was moderately well drained or somewhat poorly drained. These areas are on gently sloping or nearly level, narrow summits. The Stoy soils are dominantly on head slopes and saddles. This unit consists of 65 percent Bedford and 30 percent Stoy, with a minor component of 5 percent Bedford that is eroded and on slopes of 2 to 6 percent. The Stoy components in Lawrence County classify as Fine-silty, mixed, superactive, mesic Aeric Fragiaqualfs and are considered taxadjuncts. The Stoy Series classified as Fine-silty, mixed, mesic Aquic Hapludalfs in the "Fourth Edition of the Keys to Soil Taxonomy" and classifies as Fine-silty, mixed, superactive, mesic Fragiaquic Hapludalfs in the "Eighth Edition of the Keys to Soil Taxonomy". The Stoy series was used for this amendment because it is somewhat poorly drained, has fragic soil properties and fits the concept of these soils in Lawrence County better than any current series. When the Lawrence County Soil Survey is updated, these soils need to be further evaluated to determine the degree of development of fragic soil properties and if a new series is needed.

BrA Bromer silt loam, 0 to 2 percent slopes

This unit was separated from the Hoosierville map unit because it was somewhat poorly drained and on a different landform position underlain with limestone residuum. These areas are on divides and foot slopes around depressions, mainly in the southern part of the county. This unit consists of 85 percent Bromer, with minor components of 5 percent Crider, 5 percent Bedford and, 5 percent Peoga, clayey substratum. The Bromer Series classified as Fine-silty, mixed, mesic Aeric Ochraqualfs in the "Fourth Edition of the Keys to Soil Taxonomy" and classifies as Fine-silty, mixed, active, mesic Aeric Fragic Epiaqualfs in the "Eighth Edition of the Keys to Soil Taxonomy". The Bromer soils in Lawrence County appear to fit the new classification as they do have fragic soil properties.

PgA Peoga silt loam, clayey substratum, 0 to 1 percent slopes

This unit was separated from the Hoosierville map unit because it was on a different landform position underlain with limestone residuum and is subject to ponding. These areas are in depressions on the Mitchell Plain, mainly in the southern part of the county. This soil will probably be established as a new series during the MLRA update. This unit consists of 75 percent Peoga, clayey substratum, with minor components of 5 percent Bromer, 5 percent Haymond, 5 percent Aquolls, 5 percent Peoga, clayey substratum-undrained, and 5 percent Stendal, clayey substratum.

SyA Stoy silt loam, 0 to 2 percent slopes

This unit was separated from the Hoosierville map unit because it was somewhat poorly drained. These areas are on nearly level, narrow to fairly broad divides. This unit consists of 90 percent Stoy, with minor components of 5 percent Hoosierville and 5 percent Bedford. The Stoy components in Lawrence County classify as Fine-silty, mixed, superactive, mesic Aeric Fragiaqualfs and are considered taxadjuncts. The Stoy Series classified as Fine-silty, mixed, mesic Aquic Hapludalfs in the "Fourth Edition of the Keys to Soil Taxonomy" and classifies as Fine-silty, mixed, superactive, mesic Fragiaquic Hapludalfs in the "Eighth Edition of the Keys to Soil Taxonomy". The Stoy series was used for this amendment because it is somewhat poorly drained, has fragic soil properties and fits the concept of these soils in Lawrence County better than any current series. When the Lawrence County Soil Survey is updated, these soils need to be further evaluated to determine the degree of development of fragic soil properties and if a new series is needed.

In addition, some areas were separated from the Hoosierville map unit and changed to map units that already existed on the Lawrence County legend. Most of these were areas that were gently sloping , moderately well drained and underlain by residuum. These were mostly small areas on shoulders and backslopes of narrow divides.
Areas that were underlain by limestone residuum were changed to map unit BdB2, Bedford silt loam, 2 to 6 percent slopes, eroded; these areas were often adjacent to existing map units of BdB2.
Areas that were underlain by siltstone residuum were changed to map unit HxB2, Hosmer silt loam, 1 to 6 percent slopes, eroded; many of these areas are within the range of the Zanesville or Spickert series, but were changed to the Hosmer map unit because it was already on the legend and the acreage extent was small. These areas need to be further evaluated when the Lawrence County Soil Survey is updated.
Also, some other small areas were separated from the Hoosierville map unit and changed to the following map units: CrB, CrC2, EkB2, Ho, PeB, St and Wr.

When the revisions were completed, the acreage extent of these units were adjusted to reflect the changes made. The acreage of the Hoosierville map unit was changed from 3,842 acres to only 87 acres. The remaining areas of the Hoosierville units have fragic soil properties dominantly at depths of more than 40 inches. When the Lawrence County Soil Survey is updated, these soils need to be further evaluated to determine the degree of development of fragic soil properties.

The Field Office was provided with mylar transparencies registered to the field sheets that have the revised soil lines drawn on them.

In the process of evaluating the Hoosierville map units, discrepancies in other units were also observed, particularly with adjacent units of MuA, Muren silt loam. However, the scope of this evaluation and amendment was restricted to the Hoosierville map units. Further evaluation of the Muren map units and others are needed.